Pink Brain, Blue Brain
Claims of sex differences fall apart.

BY SHARON BEGLEY

Among certain parents, it is an article of faith not only that they should treat their sons and daughters alike, but also that they do. If Jack gets Lincoln Logs and Tetris, and Jill gets soccer team and the math club, so does Jill. Lisa Elliot, a neuroscientist at Rosalind Franklin University of Medicine and Science, doesn’t think these parents are lying, exactly. But she would like to bring some studies to their attention.

In one, scientists dressed newborns in gender-neutral clothes and misled adults about their sex. The adults described the “boys” (actually girls) as angry or distressed more often than did adults who thought they were observing girls, and described the “girls” (actually boys) as happy and socially engaged more than adults who knew the babies were boys. Dozens of such disguised-gender experiments have shown that adults perceive baby boys and girls differently, seeing identical behavior through a gender-tinted lens. In another study, mothers estimated how steep a slope their 11-month-olds could crawl down. Moms of boys got it right to within one degree; moms of girls underestimated what their daughters could do by nine degrees, even though there are no differences in the motor skills of infant boys and girls. But that prejudice may cause parents to unconsciously limit their daughter’s physical activity.

How we perceive children shapes how we treat them and, therefore, what experiences we give them.

Yet there are differences in adults’ brains, and here Elliot is at her most original and persuasive: explaining how they arise from tiny sex differences in infancy. For instance, baby boys are more irritable than girls. That makes parents likely to interact less with their “non-social” sons, which could cause the sexes’ developmental pathways to diverge. By 4 months of age, boys and girls differ in how much eye contact they make, and differences in sociability, emotional expressivity, and verbal ability—all of which depend on interactions with parents—grow throughout childhood. The message that boys are wired to be nonverbal and emotionally distant thus becomes a self-fulfilling prophecy. The sexes “start out a little bit different” in fussiness, says Elliot, and parents “react differently to them,” producing the differences seen in adults.

Those differences also arise from gender conformity. You often see the claim that toy preferences—trucks or dolls—appear so early, they must be innate. But as Elliot points out, 6-12-month-olds of both sexes prefer dolls to trucks, according to a host of studies. Children settle into sex-based play preferences only around age 1, which is when they grasp which sex they are, identify strongly with it, and conform to how they see other, usually older, boys or girls behaving. “Preschoolers are already aware of what’s acceptable to their peers and what’s not,” writes Elliot. Those play preferences then snowball, producing brains with different talents.

The belief in blue brains and pink brains has real-world consequences, which is why Elliot goes after them with such vigor (and rigor). It encourages parents to treat children in ways that make the claims come true, denying boys and girls their full potential. “Kids rise or fall according to what we believe about them,” she notes. And the belief fuels the drive for single-sex schools, which is based in part on the false claim that boy brains and girl brains process sensory information and think differently. Again, Elliot takes no prisoners in eviscerating this “patently absurd” claim. Read her masterful book and you’ll never view the sex-differences debate the same way again.

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